

AMENDED CLAIM SET

The claims have been amended as follows:

1. (canceled)
2. (currently amended) An inflator according to claim 13~~4~~, wherein the rupturable plate and the igniter are arranged such that an imaginary the central axis of the rupturable plate that penetrates a center of the rupturable plate and an imaginary the central axis of the actuating portion of the igniter towards which the output is discharged are coincident with each other.
3. (currently amended) An inflator according to claim 13~~1 or 2~~, ~~wherein the~~ ~~diffuser portion has a gas introducing chamber for introducing the pressurized gas inside the~~ ~~inflator housing, and an igniter accommodating chamber for accommodating the igniter and the~~ ~~gas discharging hole, the respective chambers define the gas discharging passage, and the~~ ~~pressurized gas inside the inflator housing is ejected from the gas discharging hole at the time of~~ ~~activation,~~
wherein the gas introducing chamber is a space directs a flow of the pressurized gas along a longitudinal formed in the axial direction of the inflator housing, and has an opening ~~portion which is in communication with the inflator housing, and the igniter accommodating~~ ~~chamber is a space directs the flow of the pressurized gas along a direction formed in the~~ ~~direction~~ orthogonal to the longitudinal axial direction of the inflator housing, ~~and~~

~~wherein a center of the second opening portion coincides with a center of the third opening portion~~~~has an opening portion which is in communication with the outside of the inflator before mounting the igniter, and~~

~~the rupturable plate is inserted from the opening portion of the igniter accommodating chamber and mounted in the igniter accommodating chamber side of the gas discharging passage which communicates the igniter accommodating chamber with the gas introducing chamber.~~

4. (currently amended) An inflator according to claim 13, further comprising: ~~1 or 2~~

~~a cylindrical cup inserted into the gas introducing chamber through the first opening portion, such that a side wall of the cup opposes the second opening portion and closes the gas discharging passage, wherein the diffuser portion has a gas introducing chamber for introducing the pressurized gas inside the inflator housing, an igniter accommodating chamber for accommodating the igniter and the gas discharging hole, the respective chambers define the gas discharging passage, and the pressurized gas inside the inflator housing is ejected from the gas discharging hole at the time of activation;~~

~~the gas introducing chamber is a space formed in the axial direction of the inflator housing and has an opening portion which is in communication with the inflator housing, and the igniter accommodating chamber is a space formed in the direction orthogonal to the axial direction of the inflator housing and has an opening portion which is in communication with the outside of the inflator before mounting the igniter, and~~

~~— a cylindrical cup with a bottom is inserted into the gas introducing chamber such that an opening portion thereof is directed to the inflator housing, and a side surface of the cup forms the rupturable plate which closes the gas discharging passage communicating the igniter accommodating chamber with the gas introducing chamber.~~

5. (canceled)

6. (currently amended) An inflator according to claim 13, further comprising: 1 or 2, wherein the diffuser portion has a gas introducing chamber for introducing the pressurized gas inside the inflator housing, an igniter accommodating chamber for accommodating the igniter and the gas discharging hole, the respective chambers define the gas discharging passage, and the pressurized gas inside the inflator housing is ejected from the gas discharging hole at the time of activation,

~~— the gas introducing chamber is a space formed in the axial direction of the inflator housing and has an opening portion which in communication with the inflator housing, and the igniter accommodating chamber is a space formed in the direction orthogonal to the axial direction of the inflator housing and has an opening portion which in communication with the outside of the inflator before mounting the igniter, and~~

a substantially cylindrical retainer for holding an the igniter therein and adapted to be inserted into the igniter accommodating chamber through the third opening; ~~is inserted and fixed inside the igniter accommodating chamber, and~~

a the-rupturable plate attached to one end of the cylindrical retainer prior to an insertion of the retainer into the third opening, such that the rupturable plate closes the second opening once the cylindrical retainer is inserted into the third opening~~is mounted from the outside of an opening portion in one end of the retainer positioned in the gas discharging passage communicating the igniter accommodating chamber with the gas introducing chamber.~~

7. (currently amended) An inflator according to claim 13, further comprising: 1 or 2,~~wherein the diffuser portion has a gas introducing chamber for introducing the pressurized gas inside the inflator housing, an igniter accommodating chamber for accommodating the igniter and the gas discharging hole, the respective chambers define the gas discharging passage, and the pressurized gas inside the inflator housing is ejected from the gas discharging hole at the time of activation,~~

~~the gas introducing chamber is a space formed in the axial direction of the inflator housing and has an opening portion which in communication with the inflator housing, and the igniter accommodating chamber is a space formed in the direction orthogonal to the axial direction of the inflator housing and has an opening portion which is in communication with the outside of the inflator before mounting the igniter, and~~

an annular fixture defining a central hole and adapted to be inserted into the ignition accommodating chamber through the third opening portion,

wherein the rupturable plate is fixed to the one surface of an annular fixture to cover the central hole, and such that the rupturable plate is sandwiched between the annular fixture and a

surface defining the second opening portion to close the second opening portion once the annular fixture is inserted into the ignition accommodating chamber~~is fixed to the gas discharging passage, which communicates the igniter accommodating chamber with the gas introducing chamber, such that the one surface is directed to the gas introducing chamber.~~

8. (currently amended) An inflator according to claim 131~~or 2~~, wherein the diffuser portion is provided with a fourth opening communicating with the gas introducing chamber for inserting the rupturable plate into the gas introducing chamber through the fourth opening, and a lid is provided to close the fourth opening~~has a gas introducing chamber for introducing the pressurized gas inside the inflator housing, an igniter accommodating chamber for accommodating the igniter and the gas discharging hole, the respective chambers define the gas discharging passage, and the pressurized gas inside the inflator housing is ejected from the gas discharging hole at the time of activation;~~

~~the gas introducing chamber is a space formed in the axial direction of the inflator housing and has an opening portion which in communication with the inflator housing and an opening portion which in communication with the outside of the inflator, before mounting the rupturable plate, and the igniter accommodating chamber is a space formed in the direction orthogonal to the axial direction of the inflator housing and has an opening portion communicating with the outside of the inflator before mounting the igniter, and~~

~~the rupturable plate is inserted from the opening portion of the gas introducing chamber which is in communication with the outside of the inflator and is mounted in the gas introducing~~

~~chamber side of the gas discharging passage which communicates the igniter accommodating chamber with the gas introducing chamber, and the opening portion of the gas introducing chamber which is in communication with the outside of the inflator is closed by a lid portion.~~

9. (currently amended) An inflator according claim 13~~to any one of claims 1 to 8,~~ wherein the igniter is mounted in the ignition accommodating chamber, the inflator further comprising:

_____ a lead wire connected to the igniter via a connector for transmitting an operation signal to the igniter ~~is connected to the igniter via a connector, and~~

_____ wherein a direction in which the lead wire extends in a direction perpendicular to an imaginary center axis of the second opening~~is different from the mounting direction of the air bag, but the same direction as the axial direction of the inflator housing.~~

10. (currently amended) An inflator according to claim 13, further comprising: any one of claims 1 to 9, which comprises

_____ a cylindrical housing having a first end defining an opening and a second end which is ~~opened at one end and closed, the cylindrical housing having, at the other end, is provided in the vicinity of the~~ second end closed surface with a gas outflow chamber having a second gas discharging hole, the first end of the cylindrical housing being and the gas outflow chamber is connected to the a gas discharging hole of the diffuser portion and extends along a direction of an imaginary longitudinal central axis of the inflator housing to receive the pressurized gas discharged from the gas discharging hole and discharging the received pressurized gas from the

~~second gas discharging hole at the opening portion of the cylindrical housing and is formed in the axial direction of the inflator housing.~~

11. (currently amended) An inflator according to claim 10, wherein a plurality of plural-second gas discharging holes ~~hole~~ are formed in on a side wall surface of the cylindrical housing ~~a gas outflow passage~~ at equal intervals.

12. (currently amended) An air bag system comprising:
_____ activation signal-outputting means including an impact sensor and a control ~~unit~~, unit; and
_____ a module case accommodating an inflator according to claim 13 ~~any one of claims 1 to 11~~ and an air bag.

13. (new) An inflator, comprising:
a cylindrical inflator housing having a first end that is closed and a second end defining an opening, and adapted to accommodate a pressurized gas therein, the cylindrical inflator housing extending in a longitudinal axial direction thereof;

a diffuser portion attached to the second end of the inflator housing, the diffuser portion including,

a gas introducing chamber in communication with the inflator housing through a first opening,

an igniter accommodating chamber for accommodating the igniter and in communication with the gas introducing chamber through a second opening, the igniter

accommodating chamber having a third opening, for inserting an igniter, at a portion opposing the second opening, and

a gas discharging hole provided in a wall of the diffuser portion for discharging the pressurized gas from the igniter accommodating chamber, an imaginary center axis of the gas discharging hole being parallel to an imaginary center axis of the first opening, such that the pressurized gas is discharged in a direction parallel to the longitudinal axial direction of the cylindrical inflator housing; and

a rupturable plate which blocks the gas passage prior to activation of the inflator, the rupturable plate being attached to the diffuser portion from a side closer to the first opening than a side of the igniter.

14. (new) An inflator according to claim 13, wherein the second opening is provided such that an imaginary center axis of the second opening is perpendicular to the longitudinal axial direction.

15. (new) An inflator according to claim 14, wherein an air bag is connected to the cylindrical housing.

16. (new) An inflator according to claim 13, wherein the gas introducing chamber directs a flow of the pressurized gas along an imaginary longitudinal central axis of the inflator housing, and the igniter accommodating chamber directs the flow of the pressurized gas along a direction orthogonal to the imaginary longitudinal central axis of the inflator housing.